

# **TEMPERATURE DETECTOR CIRCUIT AND METHOD THEREOF**

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## **ABSTRACT OF THE DISCLOSURE**

To generate a signal when a target temperature is reached,  
a temperature detector circuit comprises a first and second current  
10 sources connected in series, of which the first current source  
generates a PTAT current and the second current source is supplied  
with a temperature-independent reference voltage to generate a  
second current proportional to the reference voltage. The first and  
second currents are a first and second reference currents,  
15 respectively, at a reference temperature, and the first and second  
current sources are configured such that the ratio of the second  
reference current to the first reference current is proportional to the  
ratio of the target temperature to the reference temperature.